The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 29

#### UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex Parte CATHERINE BEUZELIN,
ALAIN BOUILLOUX,
JEAN-CLAUDE JAMMET and YVES TROLEZ

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Appeal No. 1999-0918 Application 08/399,690

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HEARD: NOVEMBER 27, 2001

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Before, WARREN, LIEBERMAN and JEFFREY T. SMITH, *Administrative Patent Judges*.

JEFFREY T. SMITH, Administrative Patent Judge.

## Decision on appeal under 35 U.S.C. § 134

Applicants appeal the decision of the Primary Examiner finally rejecting claims 1 to 4, 6, 10, 11 and 17 to 19, all of the claims pending in the application. We have jurisdiction under 35 U.S.C. § 134.

#### BACKGROUND

The invention is directed to a coextrusion binder composition including two graft copolymers. The compositions are said to be useful as an adhesive layer in multilayer composites. (Specification, p. 1). Claim 1 which is representative of the invention is attached in an appendix to this decision.

As evidence of obviousness, the Examiner relies on the following references:

4,902,749 Akkapeddi et al. (Akkapeddi) Feb. 20, 1990

van der Loos et al. (EP '512) EP 048512 Mar. 31, 1982 **European Patent Application** 

The Examiner rejected claims 1 to 4, 6, 10, 11 and 17 to 19 under 35 U.S.C. § 103(a) over the combination of Akkapeddi and EP '512.1 (Answer, p. 3).

Rather than reiterate the respective positions advanced by the Examiner and Appellants, we refer to the Examiner's Answer and to Appellants' briefs for a complete exposition thereof.

The Appellants submit that "the claims do not stand or fall together." (Brief, p. 4.) But in the "Argument" section of the brief, the Appellants merely recite the invention covered by claims 6, 10, 11 and 17 to 19 and the statement the claims are

<sup>&</sup>lt;sup>1</sup> The rejection of claims 1 to 4 and 5 under 35 U.S.C. § 112, second paragraph, has been withdrawn by the Examiner. (Answer, p. 2).

"separately patentable over the prior art, which does not teach this limitation."

(Brief, p. 8). Page 14 recites nothing more than a recitation of the features of the referenced claims along with the conclusory remark that the cited prior art does not teach or suggest the features of the claims. "Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable."

37 CFR §§ 1.192(c)(7)(1997). Accordingly, we select claim 1 from the group of rejected claims and decide this appeal as to the Examiner's ground of rejection on the basis of this claim alone. *In re Nielson*, 816 F.2d 1567, 1572,

2 USPQ2d 1525, 1528 (Fed. Cir. 1987); *Ex parte Ohsumi*, 21 USPQ2d 1020, 1023 (Bd. of Pat. Appls. and Int. 1991).

#### **OPINION**

We have carefully reviewed the claims, specification and applied prior art, including all of the arguments advanced by both the Examiner and Appellants in support of their respective positions. This review leads us to conclude that the Examiner's § 103 rejection is well founded. Our reasons for this determination follow.

Akkapeddi discloses styrenic polymers which are reacted with an ethylenically unsaturated grafting agent. Akkapeddi further discloses that rubbery

high molecular weight materials, including graft copolymers, are added to the styrenic polymers to improve impact resistance. (Cols. 3 and 4). Preferred rubbery materials include graft copolymers formed from ethylene-α-olefin copolymer having a carboxyl or anhydride functionality. (Col. 4, ll. 37 to 56). Akkapeddi discloses these compositions demonstrate adhesive properties and are useful for lamination to other polymers, coextrusion with other polymers and metal bonding. (Col. 8, ll. 37-39).

We determine that the claimed subject matter is *prima facie* obvious in view of the reference evidence to Akkapeddi alone. Based on the totality of the record, including due consideration of Appellants' arguments, we determine that the preponderance of evidence weighs most heavily in favor of obviousness under section 103. A discussion of the secondary reference to EP '512 is unnecessary to our decision.

Appellants argue Akkapeddi is not analogous art to the claimed invention. (Brief, p. 11).

The Federal Circuit has delineated two indicia for indicating whether prior art references are analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the art is not within the same field of

endeavor, whether it is reasonably pertinent to the particular problem to be solved. *In re Clay*, 966 F.2d 656, 658-59, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992); *In re Deminski*, 796 F.2d 436, 442, 230 USPQ 313, 315 (Fed. Cir. 1986); *In re Wood*, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979).

The claimed invention is directed to a binder composition which comprises two graft copolymers. One copolymer can comprise an ethylenically unsaturated grafting monomer and a styrene polymer. The other copolymer can comprise an ethylenically unsaturated grafting monomer and ethylene polymers such as ethylene-vinyl acetate, ethylene-alkyl(meth)acrylate and ethylene-olefin copolymers. (See claim 1). The specification discloses these compositions are suitable for use as an adhesive layer. (Specification, p. 1).

Appellants assert Akkapeddi is not pertinent to coextrusion binders.

Specifically, Appellants ask: "[h]ow can Akkapeddi be reasonably pertinent to coextrusion binders when it says nothing at all about coextrusion binders?" (Brief, p. 12). As stated above, Akkapeddi discloses the compositions demonstrate adhesive properties and are useful for lamination to other polymers, coextrusion with other polymers and metal bonding. (Col. 8, ll. 37-39). Thus, Akkapeddi is pertinent to coextrusion binders.

The present record indicates that the present invention and the invention of Akkapeddi both include graft copolymers which comprise similar components. Akkapeddi describes the process for forming graft copolymers which have a variety of uses. Upon consideration of the present record, we hold that, in this case, the preparation of graft polymers as described in Akkapeddi is reasonably pertinent to the claimed binder composition which contains graft copolymers.

Appellants assert in the reply brief that Akkapeddi does not teach a graft copolymer being further admixed with another graft copolymer. (Reply Brief, p. 6). This argument does not take into account the portion of Akkapeddi which discloses rubbery high molecular weight graft copolymers are added to the styrenic polymers to improve impact resistance. Appellants' arguments regarding the use of EVA graft copolymer is noted however, claim 1 is not limited to the scope of this argument.

Appellants assert the Examiner has not established a *prima facie* case of obviousness. Specifically Appellants state: [t]here is no structural similarity between the subject matter of the prior art and the subject matter of the disclosed invention." (Brief, p. 12). We disagree. As stated above, Akkapeddi discloses styrenic polymers which are reacted with an ethylenically unsaturated grafting agent and further discloses rubbery high molecular weight ethylene and α-olefin graft

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copolymers are added to the styrenic polymers to improve impact resistance.

Akkapeddi also discloses these compositions demonstrate adhesive properties and are useful for lamination to other polymers and coextrusion with other polymer.

Thus, Akkapeddi describes an embodiment which render the claimed invention obvious.<sup>2</sup>

As stated above, we rely on Akkapeddi alone to establish the *prima facie* case. We do not consider the rejection over Akkapeddi alone to constitute a "new ground" of rejection. The issue, in this respect, is whether Appellants have had a fair opportunity to react to the thrust of the rejection. *In re Kronig*, 539 F.2d 1300, 1302-03, 190 USPQ 425, 426-27 (CCPA 1976). Limiting the discussion to the evidence contained in Akkapeddi while using the same basis and teachings as the Examiner relied upon does not constitute a new ground of rejection. *See Kronig*, 539 F.2d at 1303, 190 USPQ at 427; *In re Bush*, 296 F.2d 491, 496, 131 USPQ 263, 266-67 (CCPA 1961).

<sup>&</sup>lt;sup>2</sup> During the Hearing on November 27, 2001, Appellants' representative acknowledged that the invention of claim 1 was not patentable over the invention of Akkapeddi.

#### **OTHER ISSUES**

We leave these issues to be further explored by the Examiner in the event of further prosecution of the application. Claim 1 appears to violate 35 U.S.C. § 112, 2<sup>nd</sup> paragraph, because the use of the variable (c) is not consistent throughout the claim.<sup>3</sup> Claim 10 does not appear to further limit the invention of claim 1.

 $<sup>^3</sup>$  Our decision does not rely on the portion of claim 1 which is indefinite. That is, claim 1 consistently describes variable (c) as inclusive of graft copolymers formed from ethylene -  $\alpha$ -olefin copolymer.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

#### **AFFIRMED**

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CHARLES F. WARREN

Administrative Patent Judge

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BOARD OF PATENT

PAUL LIEBERMAN

Administrative Patent Judge

JEFFREY T. SMITH

Administrative Patent Judge

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Administrative Patent Judge

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JEFFREY T. SMITH

Administrative Patent Judge

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PENNIE and EDMONDS 1155 AVENUE OF THE AMERICAS NEW YORK, NY 10036-2711 Application No. 08/399,690

### Appendix A

- 1. A coextrusion binder composition comprising:
- --at least one polymer (A) selected from the group consisting of A1, A2, A3, and A4, wherein the A1, A2, A3, and A4 groups are defined as follows:
- (A1) graft polymers resulting from the grafting of at least one grafting monomer selected from the group consisting of carboxylic acids containing ethylenic unsaturation and the corresponding ethylenically unsaturated carboxylic acid anhydrides onto
  - (a) impact or crystal styrene homopolymers or copolymers; and
- (b) styrene diene elastomer block polymers or styrene-diene elastomer block polymers in the hydrogenated state, provided that (b) in not the only polymer in the mixture of (A) and optionally (B);
- (A2) at least one copolymer selected from the group consisting of styrene diene elastomer block polymers and styrene diene block polymers in the hydrogenated state mixed with at least one polymer (B1) as defined below;
- (A3) graft polymers resulting from the cografting of at least one grafting monomer selected from the group consisting of carboxylic acids containing ethylenic unsaturation and the corresponding ethylenically unsaturated carboxylic acid anhydrides onto a mixture:
- -of at least one polymer selected from the group of impact or crystal styrene homopolymers and copolymers; and
- -of at least one polymer selected from the group (c) consisting of ethylene vinyl acetate copolymers, ethylene alkyl (meth)acrylate copolymers, ethylene homopolymers and ethylene  $\alpha$ -olefin copolymers, provided that the ethylene alky (meth)acrylate copolymers may not represent more than 40% by weight of the mixture subjected to the cografting in the case of a polystyrene content lower than 30% by weight if
- (A3) represents the major constituent of the binder composition;
- (A4) graft polymers resulting from the cografting of at least one grafting monomer selected from the group consisting of carboxylic acids containing ethylenic unsaturation and the corresponding ethylenically unsaturated carboxylic acid anhydrides onto at least one polymer selected from the group consisting of impact or crystal styrene homopolymers and copolymers, to which at least one tackifying resin (d) has been added, these graft polymers being furthermore mixed with at least one polymer (B1) as defined below; and optionally
- -at least one out of:

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(B) the polymers selected from the group consisting of:

(B1) graft polymers resulting from the grafting of at least one grafting monomer selected from the group consisting of carboxylic acids containing ethylenic unsaturation and the corresponding ethylenically unsaturated carboxylic acid anhydrides onto a polymer (c) selected from the group consisting of ethylene - vinyl acetate copolymers, ethylene - alkyl (meth)acrylate copolymers, ethylene homopolymers and ethylene -  $\alpha$ -olefin copolymers; and

(B2) terpolymers comprising a first component comprising ethylene, a second component selected from the group consisting of  $\alpha$ -olefin, vinyl acetate and alkyl (meth)acrylate and a third component comprising monomers selected from the group consisting of carboxylic acids containing ethylenic unsaturation and the corresponding ethylenically unsaturated carboxylic acid anhydrides; and (C) the polymers (a), (b) and (c) and defined above.